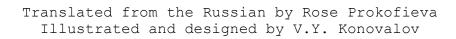


By Nikolai Nosov



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# IMPORTANT DECISION

This happened when the steam-engine, which Mishka and I had tried to make out of a tin can, blew up. Mishka let the water in the can get too hot and it burst and the steam burnt his hand. Lucky for him his mother smeared some naphtha ointment on it right away. That's a wonderful remedy. Try it yourself if you don't believe me. But be sure to rub it on as soon as you burn yourself, or else the skin will come off.

Well, after our steam-engine blew up, Mishka's mother wouldn't let us play with it any more and threw it into the dust-bin. For a while we couldn't think of anything to do and it was awfully dull.

It was the beginning of spring. The snow was melting everywhere. The water ran in little streams in the gutters. The bright spring sun shone in through the windows. But Mishka and I were in the dumps. We are a funny pair—we aren't happy unless we've got something to do. And when we haven't anything to do we sit around and mope and mope until we find something.

One day I came to see Mishka and found him sitting at the table poring over a book, with his head in his hands. He was so busy reading he didn't hear me come in. I had to bang the door hard before he looked up.

"Oh, it's you, Nikoladze," he said with a broad grin.

Mishka never calls me by my real name. Instead of calling me Kolya like everyone else, he invents all sorts of queer names for me such as Nikola, Mikola, Mikula Selyaninovich, or Miklukha-Maklai, and once he even called me Nikolaki. Every day I have to answer to a new name. But I don't mind so long as he likes it.

"Yes," I said, "it's me. What's that book you've got there?"

"A very interesting book," said Mishka, "I bought it this morning at a news-stand."

I glanced at it. The title was *Poultry Farming*. There was a picture of a hen and a cock on the cover, and on every page there were diagrams and drawings and pictures of chicken coops.

"What's interesting about it?" I said. "Looks to me like a scientific book of some kind "

"That's what makes it interesting. This isn't one of your silly fairytales. Everything in here is true. It's a useful book, that's what it is."

Mishka is the kind of chap who insists on everything being useful. Whenever he has a little pocket money he goes and buys something useful like this book. Once he bought a book called *Chebyshev's Inverse Trigonometric Functions and Polynomes*. Of course he couldn't understand a word, so he decided to put it away until he was clever enough to read it. It's been lying on the shelf ever since, waiting for Mishka to get clever.

He marked the page he was reading and closed the book.

"You can learn all sorts of things from this book," he said. "How to raise chickens, ducks, geese, turkeys, everything."

"You're not thinking of raising turkeys by any chance?"

"No, but I like to read about it just the same. It turns out you can make a machine called an incubator that hatches chickens all by itself without any hen."

"Ha!" I said. "Everybody knows that. What's more, I've seen one last year, when I was on the farm with Mother. It hatched five hundred or even a thousand chicks a day. They hardly had time to take them out."

"Really!" said Mishka all excited. "I never knew about that. I thought only brood-hens could hatch chicks. I used to see lots of sitting-hens when we lived in the country."

"Oh, I've seen plenty of them myself," I said.' "But an incubator is much better. A hen can only hatch a dozen eggs at a time, but an incubator can take a thousand at a time."

"I know," said Mishka. "That's what it says in the book. And here's another thing. A hen doesn't lay eggs when she's hatching her chicks and bringing them up, but if you have an incubator to hatch the chicks the hen can go on laying eggs."

We set to work to figure out how many more eggs there would be if all the hens laid eggs instead of hatching chickens. It takes twenty-one days for a brood-hen to hatch chickens, and if you count the time she spends looking after them when they're hatched you find that it takes about three months before she starts laying again.

"Three months, that's ninety days," said Mishka. "If the hen wasn't busy hatching chickens she could lay ninety eggs more a year, even if she only laid one egg a day. For a small farm with even ten hens that would make nine hundred eggs a year. And if you take some big collective or state farm with a thousand hens, you'd have ninety thousand extra eggs. Think of it! Ninety thousand eggs!"

We spent quite a long time discussing the usefulness of incubators.

Then Mishka said: "I say, let's make a small incubator of our own

and hatch a few eggs."

"How could we do that?" I asked. "I'm sure it isn't an easy thing to make."

"I don't think it's so hard," said Mishka. "The book tells you all about it. The main thing is to keep the eggs warm for twenty-one days funning and then the chickens will hatch out by themselves."

Now, the thought of having little chicks of our own appealed to me tremendously. I am very fond of all kinds of birds and animals. Mishka and I joined the Young Naturalists' circle at school last autumn and worked *a*. little with our pets, but then Mishka got the idea of making a steam-engine and so we stopped going to the circle. Vitya Smirnov, the monitor of the circle, told us he would cross us off the list of members if we didn't do any work, but we begged him to give us another chance.

Mishka tried to imagine how nice it would be when our chicks hatched out.

"They'll be such sweet little things," he said. "We can fix up a corner for them in the kitchen and they can live there and we'll feed them and take care of them."

"Yes, but we'll have plenty to do before that. Don't forget it takes three weeks for them to hatch out!" I said.

"What about it? All we have to do is to make the incubator, the chicks hatch out by themselves."

I thought it over for a while. Mishka looked at me anxiously. I saw that he was itching to get to work at once.

"All right," I said. "We haven't anything else to do anyhow. Let's have a shot at it."

"I knew you would agree!" Mishka cried joyfully. "I would have tackled it myself, but it wouldn't be half as much fun without you."

#### UNEXPECTED HITCH

"Perhaps we don't need to make an incubator. Let's just put the eggs in a saucepan and stand it on the stove," I proposed.

"Oh no, that would be no good at all," Mishka cried. "The fire would go out and the eggs would be spoiled. The thing about an incubator is that it keeps an even temperature all the time—102 degrees."

"Why 102 degrees?"

"Because that's the temperature of the brood-hen when she's sitting on her eggs."

"You mean to ,say hens have temperatures? I thought only human beings had temperatures when they were ill."

"Everybody has a temperature, silly, whether they're ill or not. Only when you're ill your temperature goes up."

Mishka opened the book and pointed to a drawing.

"See, that's what an incubator looks like. This is a tank for the water, and this little pipe here leads from the tank to the box where the eggs are. The tank is heated from underneath. The warm water runs through the pipe and heats the eggs. Look, there's the thermometer so you can keep watch on the temperature."

"Where are we going to get a tank from?"

"We don't need a tank. We can use an empty tin instead. We're only going to have a little incubator."

"How are we going to heat it?" I asked.

"With an ordinary paraffin-lamp. There's an old one lying in the shed somewhere."

We went to the shed and began rummaging among the rubbish piled up in the corner. There were old boots, galoshes, a broken umbrella, a good copper pipe, any amount of bottles and empty tin cans. We had gone through nearly the whole pile, before I happened to notice the lamp standing on a shelf. Mishka climbed up and took it down. It was covered with dust, but the glass was whole and to our great joy there was even a wick inside. We took the lamp, the copper pipe and a good-sized tin and carried them all to the kitchen.

First Mishka cleaned the lamp, filled it with paraffin and lit it to see how it worked. It burned quite well and you could turn the wick up and down to make the flame bigger or smaller as you pleased. We blew out the lamp and set to work on the incubator. To begin with, we made a large box out of plywood, big enough to hold about fifteen eggs. We lined it with cotton wool covered with a layer of felt to keep the eggs nice and warm. Then we made a lid for the box with an opening in it for the thermometer so we could watch the temperature. The next thing was to make the heater. We took the tin can and drilled two round holes in it, one on top and the other below. We soldered the pipe to the upper hole, made an opening in the side of the incubator box and stuck the pipe inside, bending it so as to pass the free end out again and solder it to the hole in the bottom of the can. The bent tube made a sort of radiator inside the box.

Now the lamp had to be placed so it would heat the tin can. Mishka fetched a plywood crate. We stood it up on end, cut a round hole on top and put the incubator on it so that the tin was right on top of the hole. The lamp went underneath.

At last everything was ready. We filled the tin with water and lit the lamp. The water in the tin and the pipe began to get warm. The mercury in the thermometer started to rise and before long it reached 102 degrees. It would have gone up still more if Mishka's mother had

not come in just then.

"What are you two up to now? The whole place smells of paraffin!" she said.

"It's the incubator," Mishka said.

"What incubator?"

"You know, the kind that hatches chickens."

"Chickens? Whatever are you talking about?"



"Look, Mum, I'll show you how it's done. You put the eggs in here and this lamp here...."

"What's the lamp for?"

"To heat it with. You simply must have a lamp, otherwise it won't work."

"Nonsense, I'm not going to let you play with paraffin-lamps. You'll upset it and the paraffin will catch fire. No, no, I can't have it!" "Please, Mum. We'll be very careful."

"No. I shan't let you play with lighted lamps. What next! First you go and scald yourself with boiling water and now you want to burn the house down!"

Mishka begged and pleaded with his mother, but it was no use. Mishka was terribly upset. "Bang goes our incubator!" he said.

#### WE FIND A WAY OUT

That night I couldn't sleep for a long time. I lay awake for a whole hour thinking about our incubator. At first I thought of asking my mother to let us use the paraffin-lamp, but I soon saw that was no good because she is terribly afraid of fires and is always hiding the matches from me. What's more, Mishka's mother had taken the lamp away and wouldn't give it back to us for anything.

Everyone in the house was fast asleep, but I lay there racking my brains. And suddenly a wonderful idea came into my head: why not

try using an electric lamp to heat the water?

I got up quietly, switched on the desk lamp and tried it with my finger to see whether it was getting hot. It warmed up quickly and was soon so hot I couldn't keep my finger on it. I took the thermometer off the wall and put it against the lamp. The mercury shot up right to the very top. There was no doubt about it, the lamp gave plenty of heat.

Feeling better, I hung up the thermometer and went back to bed. The thermometer, by the way, never worked properly after that night. We found that out some time later. When it was cold in the room it would show 104 degrees above zero, and when it got a little warmer the mercury would climb all the way up to the very top and stay there until you shook it down. It never showed less than 86 degrees above, so that even in winter, going by that thermometer, we wouldn't need to heat the stove. I must have spoiled it when I put it against the lamp.

The next day I told Mishka about my idea. We decided to try it out at once. When we came home from school I got my mother to give us an old desk lamp that had been lying in the cupboard for ages, and we stood it in the box in place of the paraffin-lamp. Mishka stuck a few books under it to bring the bulb closer to the water tank. Then I switched it on and we started to watch the thermometer which Mishka had brought from home.

For a long time nothing happened. The mercury stood still. We were afraid nothing would come of our experiment. But after a while the water began to get warm and the mercury started to rise. In half an hour it had climbed to 102 degrees. Mishka clapped his hands in .glee and shouted: "Hurrah, that's just the temperature we need for the chicks! Electricity is as good as paraffin after all!"

"Of course it is," I said. "In fact it's much better, because you can start fire with a paraffin-lamp but electricity is quite safe."

Just then we noticed that the mercury had moved up further and was now standing at 104 degrees.

"Hey," cried Mishka. "Look at that. It's gone way up."

"We've got to stop it somehow," I said.

"Yes, but how? If it was a paraffin-lamp you could turn down the wick."

"Electricity doesn't have wicks!"

"I don't think much of your electricity!" said Mishka, getting sore.

I got sore too. "My electricity? Why is it my electricity?"

"Well, it was your idea to use an electric lamp, wasn't it? Look, it's gone up to 108 degrees! If this goes on all the eggs will boil and there won't be any chicks."

"Wait a minute," I said. "Let's try lowering the lamp. Then it won't heat the water up so fast and the temperature will go down."

We pulled the thickest book from under the lamp and waited to see

what would happen. The mercury crawled slowly downward until it reached 102 degrees. We sighed with relief.

"Now everything is all right," said Mishka. "We can start hatching the chicks right away. I'll ask Mother for some money and you run home and ask your mother for some. Then we'll put it together and buy a dozen eggs."

I ran home and asked Mother for money to buy eggs. Mother couldn't understand what I wanted eggs for and it was some time before I got her to understand that we needed them for our incubator.

"Nothing will come of it," said Mother. "It's no easy matter to hatch chicks without a hen. You'll only be wasting your time."

But I kept insisting until she gave in.

"All right," she said at last. "But where are you going to buy the eggs? 'In the shop, of course," I said. "Where else?"

Oh no, that won't do," said Mother. "You need new-laid eggs, otherwise they won't hatch."

I ran back to Mishka and told him.

"What a donkey I am," said Mishka. "Of course, that's what the book says too. I forgot."

We decided to go to the village not far from town where we had stayed the summer before. Aunt Natasha, the landlady, kept hens and we were sure to get new-laid eggs there.

#### THE NEXT DAY

Life is funny! Yesterday we hadn't dreamt of going anywhere and here we were in the train on our way to Aunt Natasha's village. We wanted to get those eggs as soon as possible and begin hatching the chicks, but the train seemed to crawl along just for spite, and the journey took an awful long time. It's always like that, I've noticed: whenever you're in a hurry everything goes slow on purpose. Besides, Mishka and I were worried that Aunt Natasha might be out when we arrived. What would we do then?

But everything turned out all right. Aunt Natasha was home. She was very glad to see us. She thought we had come to stay with her.

"We'd love to but we can't just now," said Mishka. "Not before the holidays."

"We've come on business," I said. "We want some eggs."

"What's the matter, aren't there any eggs to be had in town?" said Aunt Natasha.

"Yes, there are," said Mishka, "but, you see, we need fresh eggs."

"And can't you get fresh eggs in the shops?"

"When the hen lays eggs they don't go straight to the shop, do they?" asked Mishka.

"Well, not right away."

"There you are, you see," cried Mishka. "The eggs are collected until there are a lot of them and it may be a whole week or two weeks, perhaps, before they get to the shops."

"Well, what of it?" said Aunt Natasha. "Eggs don't spoil in two weeks."

"Oh, don't they! Our book says you can't hatch eggs that are more than ten days old."

"Oh, hatching! That's another matter," said Aunt Natasha. "Of course you need the very freshest eggs for that, but the eggs you eat can lie for even a month or two without spoiling. You're not going to keep hens, are you?"

"Yes. That's why we're here," I said.

"But how are you going to hatch the eggs?" asked Aunt Natasha. "You need a sitting-hen for that."

"No, we'll do it without a hen. We've made an incubator."

"An incubator? Gracious me! And what do you want with an incubator, I'd like to know?"

"We want to have little chicks."

"What for?"

"Oh, just for fun," said Mishka. "It's dull without chicks. You country-folk have everything—chickens, geese, cows, pigs. But we haven't got anything."

"Yes, but we live in the country. You can't very well keep cows in the city."

"Not cows, perhaps, but you could keep some sort of animals."

"Not in town. Too much trouble," said Aunt Natasha.

"There's a man in our house who keeps birds," said Mishka. "He has lots of cages with all kinds of birds—canaries, goldfinches and even starlings."



"Yes, but he keeps them in cages. You're not going to keep your chickens in cages, are you?"

"No, we'll keep them in the kitchen. We'll find a nice place for them, don't you worry. Just let us have the best eggs you can find, the very, very freshest, otherwise they won't hatch."

"Very well, you'll have them," said Aunt Natasha. "I know the kind you need. They'll be as fresh as can be."

Aunt Natasha went to the kitchen and came back with fifteen beautiful eggs, every one of them smooth and white without a single spot. Anyone could see they were fresh. She put them in our basket and covered them with a woollen shawl so they wouldn't cool down on the way.

"Well, good-bye and good luck to you," said Aunt Natasha, as she saw us off to the gate. It was beginning to get dark outside by now and Mishka and I hurried to the station.

It was very late by the time we got home and Mother gave me a good scolding. Mishka also got told off by his mother. But we didn't mind! What we minded most of all was that it was too late that night to begin hatching chickens and we had to put it off till next day.

# THE BEGINNING

As soon as we came home from school next day we laid out the eggs in the incubator. There was plenty of room for all of them, even a little left over.

We put the lid on the incubator, placed the thermometer in the opening and were just about to switch on the lamp when Mishka said:

"Let's first make sure that we have done everything right. Perhaps we ought to warm up the incubator first and put the eggs in afterwards?"

"I don't know about that," I said. "Let's see what the book says."

Mishka got out the book and began reading. He read for a long time, then he said:

"You know, we very nearly .suffocated them!"

"The eggs. It turns out they're alive."

"Alive?" I echoed in surprise.

"Yes. Here's what the book says: 'Eggs are living things, although there is no visible life in them. It is latent as yet. But when the egg is warmed, life awakens and the embryo begins to develop gradually, eventually emerging as a fledgling. Like all living beings eggs breathe....' See that? The eggs breathe just like you and me."

"Poppycock," I said. "You and me breathe through our mouths. But what do eggs breathe through?"

"We don't breathe through our mouths, we breathe through our lungs. The air gets to the lungs through the mouth, but eggs breathe through their shells. The air passes through the shell and that's how they breathe."

"Well, let them breathe all they want," I said. "We're not stopping them, are we?"

"But how can they breathe in a box? When you breathe you exhale carbon dioxide. If you were shut up in a box you'd breathe out so much carbon dioxide that you'd suffocate after a while."

"Why should I get shut up in a box. I don't want to suffocate," I said. "Well, neither do the eggs, and we've gone and shut them up in a box."

"What are we going to do about it?"

"We need ventilation," said Mishka. "All real incubators have ventilation."

We took all the eggs out of the box, taking care not to break any, and laid them in the basket. Then Mishka brought a drill and drilled several small holes in the incubator to let the carbon dioxide out.

When that was done, we put the eggs back and covered the box with the lid.

"Just a minute," said Mishka, "we don't know yet what you're supposed to do first—heat the incubator or put the eggs in."

He consulted the book again.

"We're all wrong again," he said after a while. "It says here that the fair in the incubator must be moist, because if the air is dry the liquid inside the eggs will evaporate through the shell and the embryo can die. You have to put basins of water inside the incubator. The water evaporates and makes the air moist."

So we took all the eggs out again. We tried putting glasses of water inside, but they were too high and the lid wouldn't shut. We looked around for something smaller but we couldn't find anything. Then

<sup>&</sup>quot;Suffocated who?"

Mishka remembered that his little sister Maya had a set of toy bowls made of wood.

"What if we take a couple of Maya's bowls?" he said.

"A good idea!" I said. "Go and get them."

Mishka found Maya's dishes and took four small wooden bowls. They turned out to be just the right size. We filled them with water and put them inside the incubator, one in each corner. But when we tried putting the eggs back again, we found that there was only room for twelve now. Three were left over.

"It doesn't matter," said Mishka. "Twelve chicks will be plenty. What do we need any more for? We'll need plenty of food for all of them as it is."

Just then Maya came in and when she saw her bowls in the incubator she set up a howl.

"Listen," I said, "we aren't taking them for keeps. In twenty-one days from now you'll get them back. If you like, we can give you three eggs for them now."

"What do I need eggs for? They're empty."

"No, they're not. They've got yolks and whites and everything else."

"But they haven't got chicks!"



"When the chicks hatch out, we'll give you one."

"Honest and truly?"

"Yes, yes. But run along now and don't bother us. We're having a hard enough time as it is, trying to figure out how to begin. We don't know whether you put the eggs in first and then heat up the incubator or heat it up first and put the eggs in afterwards."

Mishka consulted the book again and found that you could do it either way.

"All right," I said. "Switch on the electricity and let's get started."

"I'm a little bit scared," said Mishka. "I'll tell you what. You'd better

switch on the light, I'm always unlucky."

"What makes you think that?"

"I'm just unlucky, that's all. Nothing I do ever succeeds."

"Same here," I said. "I'm always having bad luck too." We both began remembering all sorts of things that had happened to us in our lives, and it turned out that we were both terribly unlucky.

"It's no use either of us starting a thing like this," said Mishka. "It's bound to be a failure."

"Let's ask Maya," I said. Mishka called his sister in.

"Listen, Maya," I said. "Are you lucky?"

"Oh, yes."

"Have you ever had any failures in life?"

"Never."

"Good! Now, see that lamp in the box?"

"Yes."

"Well, go and plug in the cord."

Mayka went over to the incubator and plugged in the cord.

"What else?" she asked.

"Nothing," said Mishka. "Now run along and don't bother us."

Maya went off in a huff. We quickly put the lid on and began watching the thermometer. At first the mercury stood at 64 degrees but gradually it began to rise until it reached 68 degrees. Then it went up a little faster to 77 degrees and when it got to 86 degrees it slowed down. In half an hour it rose to 95 degrees and then stopped. I put another book under the lamp and the mercury began to go up again. It climbed to 102 degrees and went on rising.

"Stop!" cried Mishka. "Look! It's up to 104. The book is too thick."

I pulled out the book and put in a thinner one. The mercury began to go down. It went down to 102 degrees and dropped still further.

"That one's too thin," said Mishka. "Wait, I'll bring an exercise book."

He ran for the exercise book and stuck it under the lamp. The mercury began to go up again, went up to 102 degrees and stopped. We kept our eyes glued to the thermometer. The mercury stood still.

"There," whispered Mishka. "We have to keep that temperature steady for twenty-one days. Think we can?"

"Of course we can," I said.

"Because if we don't, all our work will be for nothing."

"Of course we'll do it. Who said we won't!"

We sat beside our incubator all day long. We even did our lessons in the kitchen, keeping an eye on the thermometer all the time. It stood at 102 degrees.

"Everything's going fine," crowed Mishka. "If we keep it up we'll have our chicks in exactly twenty-one days. Think of it, twelve fluffy

# THE TEMPERATURE FALLS

I don't know about other boys but I like to sleep late on Sundays. On Sundays you don't have to go to school or rush off anywhere. Once a week a fellow can lie around in bed. There's nothing wrong in it, if you ask me. The next day happened to be Sunday but for some reason I woke up very early. The sun wasn't up yet but it was already light. I was just about to turn over and go back to sleep when I suddenly remembered the incubator. I jumped out of bed, dressed quickly and ran over to Mishka's. Mishka opened the door himself.

"Shhhh," he hissed. "You'll wake everybody up. What's the idea of coming here so early in the morning, ringing the bell as if the house was on fire!"

He was in his night-shirt and his feet were bare.

"But you're up, aren't you?" I said.

"Up!" growled Mishka. "Haven't been to bed yet."

"Why not?"

"All because of that blinking incubator."

"Anything happened?"

"Keeps dropping."

"But why should it drop? It was standing pretty solid yesterday."

"Not the incubator, silly! I mean the temperature."

"Why should it drop?"

"That's what I'd like to know. When I went to bed everything was all right, but I couldn't fall asleep for a long time for thinking about our chicks. After a while I got up just to see how the incubator was getting along. I ran into the kitchen and, what do you think —the thermometer was down to 101 degrees! I stuck another book under the lamp right away and waited until the temperature went up to 102 degrees. It's a good thing I hadn't fallen asleep or our chicks would have been done for. Instead of going back to bed I decided to wait awhile and see what happened. I waited. One hour passed, two hours, and the temperature didn't change. I was tired of sitting around doing nothing, so I found a book and started to read. But I got so interested in the story that I forgot all about the thermometer. And when I looked up it was down to 101 degrees again. It had dropped another degree! I put one more exercise book under the lamp and the temperature evened up again. You see, it's steady now, but you never can tell what it will do later on."

"You'd better go to bed now," I said. "I'll stay here and watch for a while."

"What's the use of going to bed now?" said Mishka. "It's broad

daylight."

He tiptoed back to his room, brought his clothes and started to dress. He put on his trousers and shirt, laced up his boots, then lay down on the couch and fell asleep.

"I shan't wake him," I thought. "A fellow has to get some sleep sometime."

I sat down beside the incubator and began watching the thermometer. After a while I got tired of doing nothing, so I got the book about poultry farming and read the bit about incubators. It said that if the eggs lie in one position the embryo is liable to get stuck to the shell on the inside, and then the chicks will turn out deformed and misshapen, or else very weak and feeble. To prevent the embryo from sticking to the shell the eggs must be turned every three hours.

I opened the incubator and started turning the eggs. Just then Mishka woke up. When he saw I had opened the incubator he jumped up, shouting: "What the dickens are you doing!"

I got such a fright I nearly dropped one of the eggs.

"Nothing," I said.

"What do you mean 'nothing'? What have you opened the incubator for? Didn't I tell you we have to wait twenty-one days. I suppose you think you can hatch chickens in one day."

"I don't think anything of the kind," I said. I tried to explain to him about having to turn the eggs round every three hours, but he wouldn't listen and kept shouting at the top of his voice:

"Put the lid on! Put it on, I tell you! A fellow can't fall asleep for a minute. As soon as I shut my eyes you had to go and open the incubator."

"I wasn't looking at them at all," I said.

He ran over and put the lid on, but by that time I had turned them all over.

Mishka had kicked up such a row that his Pa and Ma came running in

"What's all the noise about?" they asked.

"This donkey went and opened up the incubator," said Mishka.

I explained that the eggs had to be turned over, otherwise the chicks would come out lop-sided.

"Who said so?" said Mishka. "Why don't hens hatch lop-sided chicks?"

"Hens always turn the eggs over when they're hatching chicks," said Mishka's mother.

"How does a stupid hen know that eggs have to be turned over?" said Mishka.

"They're not so stupid as you think," replied his mother. Mishka thought for a moment.

"Now I come to think of it, I've seen them turning over their eggs myself," he said at last. "I always wondered why they kept pushing at them with their noses."

Mishka's papa laughed. "Silly boy," he said. "When did you see a hen with a nose?"

"Beak, I mean. But it's the hen's nose just the same."

# THE TEMPERATURE RISES

Around ten o'clock the mercury in the thermometer went up one degree for some reason, so we had to pull out one of the exercise books and lower the lamp.

"I can't make it out," said Mishka, puzzled. "All night long the temperature kept dropping and now it's going up again. Queer."

We had to lower the lamp once more before dinner because the temperature went up again. After dinner, Mishka stretched out on the sofa and fell asleep again. I felt lonely sitting there by myself, so I brought my album and sketched Mishka as he slept. It's always easier to draw people when they're asleep because that's the only time they keep still.

After a while Kostya Devyatkin came in. When he saw Mishka asleep he .said: "What's wrong with him, sleeping sickness?"

"No," I said. "He's just having a nap."

Kostya went over and shook Mishka by the shoulder.

"Hey, it's time to get up!" Mishka sprang up. "Eh, what? Is it morning already?"

"Morning!" laughed Kostya. "It'll soon be evening. Get up and come out to play. Look, the sun's shining and the birds are singing."

"We've no time for playing. We have work to do!" said Mishka.

"What work?"

"Very important work."

Mishka went over to the incubator, looked at the thermometer and let out a yell:

"What are you doing! Sitting there like a goat in the market-place? Look what's happened!"

I looked at the thermometer. It showed 103 degrees again.

Mishka quickly lowered the lamp.

"If I hadn't waked up you'd have let it go up to 104 degrees, I bet!" he raged.

"It's not my fault if you snooze all the time," I said.

"Is it my fault I didn't sleep all night?"

"It isn't my fault either," I said.

Kostya noticed the incubator. "What's that? Another steam-engine?"

he asked.

"Don't be silly, does it look like a steam-engine?"

"Well, what is it, then?"

"Guess!"

"Hm!" said Kostya, scratching his head. "Must be a steam-turbine."

"Wrong. Try again."

"All right, then. Some sort of jet engine."

Mishka and I burst out laughing. "You can guess for a hundred years and you'd never guess!"

"Well, what is it?"

"An incubator."

"Ah, an incubator. I see. What's it for?"

"Don't you know what an incubator's for?" said Mishka. "It hatches chickens."

'.'What does it hatch them out of?"

Mishka snorted with disgust. "Out of eggs, of course, you chump."

"Oh, eggs! Of course. It's instead of a hen. I know all about it, only I thought it was called a hencoopater. And where are the eggs?"

"Here, inside the box."

"Let's see them."

"Nothing doing. If we show everybody we'll never have any chicks. If you like, you can wait until we turn them over and then you'll see."

"And when will that be?"

Mishka and 1 did some quick figuring and it turned out that the eggs would have to be turned over at eight o'clock.

Kostya said he would wait, so Mishka brought in his chess-board and we sat down to play. To tell the truth, it's not much fun for three to play chess, because only two can play really and the third sits by and gives advice. And nothing good ever comes of that. If you win they say it was because you were helped, and if you lose they laugh at you and say that you can't even play when somebody prompts you. Chess is a game that should be played by only two people at a time and with no one interfering.

At last the clock struck eight. Mishka opened the incubator and started turning the eggs round while Kostya stood by and counted.

"Ten, eleven," he counted. "Eleven eggs. So you'll have eleven chicks?"

"Eleven?" echoed Mishka in surprise. "You've made a mistake. There were twelve. Dash it all, someone's gone and stolen one. It's a rotten shame! You can't take a nap around here without eggs being stolen. What were you doing?" he pounced on me. "You were supposed to be watching!"

"So I was. I was here all the time. Let's count them again. Kostya must have made a mistake."

Mishka counted the eggs over again and got thirteen.

"Look at that," he growled. "Now there's an extra one. Who could have put it there?"

Then I counted them and there were exactly twelve.

"Some counters!" I said. "Can't even count up to twelve."

"Oh dear," wailed Mishka. "Now I'm all mixed up. I had one egg left to turn over and now I don't remember which one it was."

While he was trying to remember, Maya came running in. She went straight up to the incubator, pointed to the biggest egg and said: "That's my chick in there."

Mishka and I got angry and pushed her away. "If you come in here bothering us again you won't get any chick at all," we told her. Maya began to cry.

"You took my bowls. I can look as much as I like."

"Oh, can you? We'll see about that," said Mishka, closing the door firmly behind her.

"What shall we do now?" I said. "Shall we have to turn all the eggs round again?"

"No, we'd better not, or else we may turn them back on the side they were lying on. Better let one of them stay as it was. Next time we'll be more careful."

"You ought to mark the eggs so you'll know which you've turned and which you haven't," Kostya proposed.

"How?" asked Mishka.

"You can put a cross on them."

"No, I'll number them." Mishka got a pencil and wrote a number on all the eggs from one to twelve.

"The next time we turn them over all the numbers will be underneath, and after that the numbers will be on top again. No chance of making any more mistakes," said Mishka, and closed the incubator.

As Kostya was leaving, Mishka said to him:

"Don't tell anybody at school about our incubator."

"Why not?"

"Oh, I don't know.... They'll laugh at us."

"Why should they laugh? An incubator is a very useful thing."

"Well, you know what the boys are like, they'll say we're like a couple of sitting-hens. And then, suppose it's a failure. We'll never hear the end of it."

"But why should it be a failure?"

"Anything can happen. It's not as easy as you think. For all we know, we may be doing it the wrong way. So you keep quiet about it." "All right," said Kostya. "I'll keep mum."

# MAYA ON DUTY

"Well, how's everything?" I asked Mishka when I met him the next morning.

"Fine, only the temperature kept dropping again all night long."

"You mean to say you didn't go to bed last night either?"

"No, I'm smarter now, I put the alarm clock under my pillow and it woke me up every three hours."

"But why did the temperature drop? It stayed up during the day," I said.

"I know why," said Mishka. "It's cooler at night and so the incubator cools down faster. But in the daytime it gets warmer, that's why the temperature goes up by day and down at night."

"How are we going to manage?" I asked him. "Who's going to look after the temperature while we're at school?"

"Perhaps Maya will. Let's ask her."

Mishka called Maya in and asked her if she would agree to look after the incubator while we were at school.

"No, I won't," said Maya. "Yesterday you pushed me out of the room and now you want me to help you."

"Look here," I said. "You don't want the chicks to die, do you? Because if we don't take care of them they will, and so will your chick too. We're not asking for ourselves, it's for the chicks' sake."

She couldn't refuse when I put it to her like that. I showed her what had to be done.



"See this thermometer," I said. "The mercury has to stand exactly at 102 degrees. Will you remember?"

"I'll remember."

Just to make sure I took a red pencil and marked where the mercury should stand.

"Now see you don't get anything mixed up," I said. "As soon as the mercury goes the least little bit higher you pull one of the exercise books from under the lamp. When the lamp is lowered the mercury in the thermometer comes down too. Understand?"

"Yes. I understand."

After that I showed her how to turn the eggs and told her that as soon as the clock struck eleven she must open the incubator and turn the eggs.

Maya caught on. I made her repeat the instructions to make sure that she got everything straight. Then Mishka and I went off to school.

"Well, how's your incubator getting along?" asked Kostya as soon as we entered the class-room.

"Shh," Mishka hissed, glancing over his shoulder to see if anyone had heard.

"I was whispering."

" 'Whispering'! growled Misha. "You were yelling at the top of your voice.

"All right, mum's the word. But I say, do let me tell the others."

"If you do, you'd better not come and see us any more. You promised to keep it a secret and now you go. . . ."

"All right, I'll keep quiet. Listen, I've got a wonderful idea. At Natural History lesson, I'll tell Marya Petrovna about your incubator. She'll be ever so pleased."

"You dare! If you tell Marya Petrovna the whole class will hear."

"All right, I'll shut up. I'll be as silent as the grave."

Kostya covered his mouth with his hand and walked away. But you could see that he was just itching to tell someone about our incubator.

Lessons began. Mishka could hardly keep still for worrying about the incubator.

"What if Maya does something wrong?"

"But what can she do?"

"She might forget to watch the temperature."

"But I gave her strict instructions."

"Suppose she gets tired of staying home and goes out to play?"

"She promised she wouldn't."

"What if she goes and takes the bowls out of the incubator?"

"She won't do that."

"The bulb might burn out. What'll we do then?"

At Natural History lesson Mishka and I talked so much that Marya Petrovna separated us. Mishka sat looking like a thunder-cloud, glaring at me from the other end of the room. And to make matters worse, Kostya cupped his hand to his mouth and called out in a loud whisper:

"Hey! I'm going to tell Marya Petrovna about your incubator."

Mishka writhed on his seat and hissed back: "Traitor, sneak!"

But Kostya had already shot up his hand.

"Yes, Kostya?" asked Marya Petrovna.

Mishka shook his fist at Kostya.

"Marya Petrovna, what is an incubator?" Kostya asked innocently.

Marya Petrovna began to explain what an incubator was. She said that long, long ago people learned how to hatch chickens without brood-hens by heating the eggs to a certain temperature. Even in ancient Egypt and China, two thousand years ago, they had incubators. Archaeologists have found incubators made by the ancient Egyptians. Of course they weren't big ones and they didn't hatch very many chickens at a time. Today there are incubators which take several thousand eggs at a time.

"Two chaps I know made an incubator themselves," said Kostya. "Do you think they'll hatch any chicks?"

"You *can* hatch chickens in a home-made incubator," answered Marya Petrovna, "but it is a great deal of trouble. Factory incubators have all sorts of devices for regulating the temperature and moisture, but home-made incubators require careful watching. If your friends are persevering and serious they will succeed. But if they are anything like our Misha and Kolya I'm afraid nothing will come of it."
"Why?" Mishka blurted out.

"Because you are very badly behaved and inattentive even in class," said Marya Petrovna and went on with the lesson.

Just as we were leaving school that day, Vitya Smirnov grabbed hold of us and said it was our turn that 'day to work in the Young Naturalists' circle.

"Oh no, we can't possibly," said Mishka all excited. "We haven't any time."

"You never have any time for anything. Why did you join the circle if you never come? This is spring, the busiest season. We have to make bird-houses."

"We'll make bird-houses later on."

"But the birds will be arriving soon."

"No, they won't."

"What do you mean? You think the birds are going to wait for you?" "They'll wait, just a little," said Mishka.

We ran home. To our relief everything was in order. The bulb had not burned out and the temperature was just right. Maya was sitting at her post beside the incubator. We thanked her and sent her off to play.

#### A CALAMITY!

From that time on life became a daily routine of watching the

thermometer and turning the eggs over every three hours and refilling the water tank and the wooden bowls, because the water evaporated quickly. It wasn't what you would call hard work but you had to be on the look-out all the time, otherwise something was bound to happen—either the temperature would suddenly go up or you'd forget to turn the eggs. You had to keep your mind on the incubator all the time.

Mishka had the worst of it because he had to watch at night. He didn't get a decent night's sleep and for days he went about as groggy as a fly in autumn. He often took a nap after dinner on the couch in the kitchen and I would take out my drawing-book and sketch him while he slept.

That went on for five days and five nights. On the sixth day Mishka fell asleep in school, right in the middle of a lesson. Of course Nadezhda Viktorovna scolded him and the whole class made fun of him.

Mishka felt very bad about it. Everybody likes to laugh at other people but nobody likes to be laughed at himself.

The worst of it was that I had brought my drawings to school that day to show the boys. They guessed at once it was Mishka I had sketched sleeping in different poses—lying, sitting and half standing.

"You certainly are a champion sleeper," said Lyosha Kurochkin to Mishka.

"He's beat the world record!" added Senya Bobrov. "Sleeps like a dormouse, twenty-four hours a day!"

The drawings were passed from hand to hand. Everybody made funny remarks and roared with laughter.

"What did you go and bring those stupid drawings of yours here for," Mishka pounced on me.

"How did I know they would think it so funny?" I said.

"You did it on purpose so the whole class should have a good laugh at my expense. A fine friend you are! I shan't have anything more to do with you."

"Mishka, I swear I didn't do it on purpose, honestly I didn't. If I had known this would happen I would never have sketched you at all," I protested.

But Mishka wouldn't talk to me all that day. In the evening he said:

"You ought to take the incubator over to your place and do some night watching yourself instead of drawing silly cartoons of me."

"I don't mind," I said. "You've watched for five nights. Now it's my turn "

We carried the incubator over to my place. And now my troubles began.

Every night I put the alarm clock under my pillow and in the middle of the night it went off right in my ear. I'd get up and stagger to the kitchen, check the temperature, turn the eggs over and stagger back to bed again. Most times I couldn't fall asleep at first, but the minute I dozed off the alarm would start buzzing again until I was ready to smash it to pieces for not letting me sleep.

Every morning I got up feeling so groggy I could hardly get out of bed. Half asleep, I'd pull on my clothes, and before I knew it I'd find myself trying to pull my trousers on over my head or sticking my legs through my shirt sleeves. Once I even put my boots on the wrong feet. The boys noticed it and made fun of me, and I had to change during the lesson.

But the worst calamity happened on the tenth night. I don't know whether it was because I had forgotten to wind the clock or because I didn't hear it go off. Anyhow, I went to bed and didn't wake up until morning. When I opened my eyes it was broad daylight. At first I couldn't understand what had happened, and then I remembered I hadn't got up once during the night. I jumped out of bed and rushed to the incubator. The thermometer showed 99 degrees. Three whole degrees less than it should be! I quickly stuffed two exercise books under the lamp. But in my heart I knew it was no use. The eggs must be quite cold by now. Ten days' hard work wasted! The embryos must be quite big by now and now I'd gone and ruined everything!

I was so angry with myself I punched my own head.

The mercury gradually rose until it reached 102 degrees. As I watched it, I thought sadly to myself:

"There, the temperature's normal. The eggs look exactly the same as before but inside they're all dead and there won't be any chicks."

But perhaps nothing had happened after all, perhaps the embryos hadn't had time to die. How could we find out? The only way was to go on heating the eggs and if on the twenty-first day the chicks didn't hatch out that would mean they had died. Maybe they weren't dead. But it would be eleven whole days before I knew!

"That's the end of our happy family!" I thought sorrowfully. "Instead of twelve little chicks there won't be a single one."

Just then Mishka came in. He looked at the thermometer and said brightly:

"Splendid! Just the right temperature. Everything's going fine. Now it's my turn to take night duty."

"No," I said. "I'd better carry on myself. Why should you suffer for nothing?"

"Why for nothing?"

"Suppose the chicks don't hatch out?"

"Well, even if they don't, there's no reason why you should do all the hard work. We're friends. So we each have to do our share."

I didn't know what to say. I hadn't the courage to confess, so I

decided to say nothing at all. I know it was not nice of me, but I couldn't help it.

#### PIONEER RALLY

Kostya came in to see us every day, and then reported to the fellows how the hatching was coming along. Of course he didn't tell them that it was Mishka and me who had made the incubator. He pretended it was some boys from another school.

"I'd like to meet those boys," Vitya Smirnov said one day. "What for?"

"They sound interesting. We could do with a few like that in our Young Naturalists' circle. We'd have things going fine. But with chaps like Misha and Kolya you can't get anything done. They don't want to do any work at all. They didn't help to plant trees, and now they aren't making bird-houses. . . . "

"Those boys didn't plant trees either," said Kostya with a wink at Mishka and me.

"Well, that's different. They've got enough to do without that."

Vitya never suspected that me and Mishka were the boys Kostya had told him about. And we certainly had plenty of worry. Because of the incubator we had neglected our lessons, and we both got 2 out of 5 in arithmetic.

Alexander Yefremovich gave me a problem to solve on the blackboard. I couldn't do it, so he gave me a 2. Then he called Mishka and gave him a 2 plus. Of course we deserved it because we hadn't learned the lesson, but it was very unpleasant to get low marks just the same.

"It isn't *so* bad for you," said Mishka. "You only have a 2, but I've got 2 plus."

"Silly, 2 plus is higher than 2," I said.

"Rubbish! A plus after 2 doesn't make it 3, does it?"

"No, it will be 2 just the same."

"Then what is the plus for?"

"Dashed if I know."

"I'll tell you. The plus is so you shouldn't feel so bad about the 2. It's like saying: there's a nice little plus for you. But the 2 remains a 2. That's what hurts."

"Why does it hurt?"

"Because it shows you're a dunce. If you weren't, a plain 2 would be enough to show you that you don't know anything. But a dunce has to have a 2 plus so that he shouldn't think he's being treated unfairly. But I don't like being considered a dunce. You can get a 2 minus also," he went on. "I don't see the sense of that at all. A 2 means that you don't

know anything. But how can you know less than nothing?" "You can't," I said.

"That's what I say!" said Mishka. "A 2 minus means you not only don't know anything but you don't want to know. If you just haven't done your lessons you get a 2, but if you are a well-known loafer they give you a 2 minus to make you feel it. You can even get a 1, you know," he went on, getting into his stride.

But he didn't have a chance to say any more about that because Alexander Yefremovich separated us.

At the last break Zhenya Skvortsov said: "Stay in class after lessons. We're going to have a rally."

"Oh, but we can't stay, we've no time," said Mishka and I.

"You've got to stay," said Zhenya, "because we're going to talk about you two."

"What have we done?"

"You'll find out at the meeting," was all Zhenya said.

"I like that!" said Mishka. "We only just got that 2 and they're already calling a meeting about it. He thinks because he's the group chairman he can call meetings about everybody. Wait till he gets a 2 himself, I'd like to see him calling a meeting about that."

"He won't get 2, he's good at lessons," I said.

"What are you sticking up for him for?"

"I'm not sticking up for him."

"Dash it, now we'll have to stay behind," Mishka fussed.

"That's all right," I said. "Maya is looking after the incubator." We stayed for the meeting.

"Today we are going to talk about marks and conduct," began Zhenya Skvortsov. "Lately some boys have been misbehaving in class, fidgeting and chattering and interfering with the others. Misha and Kolya are the worst offenders. They have had to be separated several times for talking. That won't do. It's no good at all. And now to cap it all they both got a 2 today."

"We didn't both get anything of the kind. I got a 2 plus," said Mishka.

"It makes no difference," said Zhenya. "You've both been getting low marks in other subjects too."

"We haven't any other 2's, and I only have a 3 for Russian," said Mishka.

"He has a 3 minus," put in Vanya Lozhkin.

"You keep your nose out of this," said Mishka.

"What do you mean? This is a Pioneer meeting. I have a right to say what I like."

"You have to ask for the floor first."

"All right, I want the floor. Boys, if you ask me, they are getting bad

marks because for some reason they haven't been doing any homework lately. Let them tell us what that reason is."

"That's right, tell us. We've a right to know," said Zhenya.

"There isn't any reason," replied Mishka.

"I know what it is," said Lyosha Kurochkin. "They talk all the time in class and don't listen to the teacher, and they don't study at home either. I think they ought to be separated once and for all, so they won't jabber."

"You can't separate us," said Mishka. "We're friends. You can't go and separate friends, can you?"

"If being friends only does you harm, it's the best thing to do," said Senya Bobrov.

At that point Kostya stood up for us. "Whoever heard of friendship doing anyone any harm," he said.

"Theirs does, because they copy each other in everything. If one of them talks, the other talks too, if one of them doesn't want to do his lessons, the other one doesn't either. If one gets a 2, so does the other. No, they've got to be separated and that's all," said Vitya Smirnov.

"Just a minute," said Kostya. "We can always separate them. But let's first see if we can't help them. Suppose they haven't any time to do their lessons?"

"What do you mean, haven't any time?"

"Well, suppose they're busy doing something very important."

Senya Bobrov laughed. "Something very important? What could that be?"

"Suppose they are making an incubator?"

"An incubator?" Senya laughed again.

"Yes, an incubator. Think it's easy? For all you know they don't sleep nights watching over the temperature. For all you know they work at it all day long and here we are scolding them. For all you know..."

"What's all this mystery about I'd like to know," Zhenya said, getting angry. "Have they really made an incubator?" "Yes," said Kostya.

"They went and copied those boys you told us about," said Vitya. "No," said Kostya. "They didn't copy anybody. They're the boys I told you about." "What?!" "That's right."

"But—but you said they were from another school?" "I just said that for fun." Everyone crowded round Mishka and me. "So you made an incubator all by yourselves?" And Vitya Smirnov said: "It's a shame! Real naturalists don't do things like that. Fancy making an incubator and keeping quiet about it! Don't you 'think we'd all be interested in a thing like that? Why should you keep it a secret?"

"We thought you'd just laugh at us," we said. "Why should we laugh? What's funny about it? On the contrary, we could have helped you. We

could take turns watching the temperature. It would be easier for you and you'd have time to do your lessons."

"Boys," said Vadik Zaitsev. "Let's take patronage over that incubator."

"That's right!" they all shouted.

Vitya said he would come and see us after dinner and we'd work out a schedule and arrange for everyone to take turns.

At that the meeting closed.

### PATRONS AT WORK

After dinner nearly the whole Young Naturalists' circle gathered in our kitchen. We showed them our incubator and told them how the heating apparatus worked, how we checked the temperature and turned the eggs over at regular intervals. Then we sat down to work out the schedule. But first, at Vitya Smirnov's suggestion, we drew up a list of rules for those on duty.

Every day after school two boys were to come to us and Mishka and I would tell them what to do and leave them in charge of the incubator for the rest of the day. They themselves would take time off by turns to go home for dinner and do their lessons. It was part of their job to see that Mishka and I didn't hang around the incubator instead of doing our lessons.

After that, Vitya drew up the schedule so each one would know what day he would be on duty. We hung it up on the wall.

"Why aren't our names on it?" Mishka asked. "Are we going to be left out?"

"What about the night-time?" replied Vitya. "You will have to take turns doing night duty."

After that Zhenya sent all the boys away.

"Everyone can go except the two on duty today," he said. "There's no use having everyone hanging around."

The others went away, leaving Zhenya, Vitya, Mishka and me.

"You go along too," said Zhenya when we were alone.

"Where shall we go?"

"Go and do your lessons."

"But suppose something goes wrong here."

"Nothing will go wrong. If anything happens I'll call you."

"All right. But be sure you do."

So Mishka and I had to sit down and do our lessons. We did our grammar, and geography, and one sum. There were two, but the other one was too hard, so we laid it aside and went to see what was going on in the kitchen.

"What are you doing here?" said Zhenya when we came in. "Weren't

you told to do your lessons?"

"We've done them already."

"Have you? Let's have a look at your exercise books."

"Hey, what's this?" said Mishka. "A check-up?"

"We've taken patronage over you, so we're responsible for you, see?"

We brought in our exercise books.

"But you've only done one sum. There are two."

"We'll do the other one later on."

"Oh no, you'll do it right now. If you start putting it off you'll forget, and then you'll turn up at school tomorrow with nothing done."

"We've done one sum, haven't we?"

"One isn't enough," said Zhenya firmly. "You know the proverb: 'Work's 'done, now for some fun.' "

So we had to go back and puzzle over that problem. We worked and worked but it wouldn't come out. We spent a whole hour over it, and then we went back to the kitchen.

"It doesn't come out," said Mishka. "We did everything right, but the answer we get isn't the same as the one at the back of the book. Must be a misprint."

"That's right, go and blame the book!" said Zhenya.

"It's happened before that the answer in the book wasn't right."

"Nonsense!" said Zhenya. "Let's have a look at it."

He went with us to our room and looked over what we had done. He puzzled and puzzled over the problem, everything seemed to be right, but the answer didn't come out.

"What did I tell you!" said Mishka gleefully.

But Zhenya said there must be some mistake and he wouldn't give up until he'd found it. He checked the sum from the beginning again and at last he found the mistake.

"Here it is," he said. "What's seven times seven, eh?"

"Forty-nine, of course."

"Yes, but look what you've got? Twenty-one!"

He corrected the mistake and everything came out right.

"It's all because you're careless," he said and went back to the incubator.

We copied out the problem into our exercise books and went back to the kitchen.

"We've finished," we said.

"Good, now you had better go out for a walk. A little fresh air will do you good."

There was no use protesting, so Mishka and I went off. It was a fine sunny day. The 'boys in the yard were playing volleyball and we joined

them. After that, we went in to Kostya Devyatkin's, and while we were there, Vadik Zaitsev dropped in and the four of us played lotto and all sorts of other games until evening. It was quite late when we got home. We went straight to the kitchen and found Vanya Lozhkin there besides Zhenya and Vitya. He said he had persuaded his mother to allow him to look after the incubator that night.

"Hey, what's this!" said Mishka. "Me and Kolya won't ever get a chance to do anything this way! Vanya takes night duty tonight, and someone else will get permission tomorrow. No, I can't agree to that."

"All right," said Vitya. "I'll put you down on the time-table and you'll take turns like everybody else."

So he put us down last on the list.

Mishka and I began figuring out when our turn would come round, and it came out on the best day of all, the twenty-first day, the day the chickens were supposed to hatch out!

# FINAL PREPARATIONS

Now at last Mishka and I could relax. To tell the truth, we weren't sorry, because the incubator had become a bit of a burden to us. We had been tied to it day and night and we were so afraid of forgetting something that we thought of it all the time. Now everything was going along splendidly without us.

We began to do our share of work in the Young Naturalists' circle. We made two bird-houses and hung them up in our garden, and planted flowers and trees in our school garden. But the most important thing was that now we had plenty of time to do our lessons. And when my mother and Mishka's saw that we were getting better marks they were glad the boys were helping us look after the incubator.

When the Young Naturalists' circle met, Marya Petrovna told us how to prepare for the arrival of the chicks. She advised us to plant some grass *so* they should have fresh greens to eat. She said that the best thing to plant was oats because they are very nourishing and grow fast.

Now where were we to get the oats to plant?

"We'll have to go to the bird market," said Vanya Lozhkin. "They sell all sorts of bird food there."

After school Vanya and Zhenya went off to the bird market. Two hours later they came back with their pockets full of oats and quite a tale to tell.

"There weren't any oats at the bird market. We went all over the place and saw all sorts of things—hemp, millet, burdock seed, everything except oats. We thought we'd have to come without any but we decided to go and have a look at the rabbits before leaving.

While we were looking at the rabbits we saw a horse eating oats out of a nose-bag. So we asked for some."

"Whom did you ask, the horse?" Mishka said surprised.

"Don't be silly! We asked his owner, of course, the collective farmer who had brought the rabbits to the market. He was a nice man. He asked us what we wanted oats for and when we told him we wanted them for chicks he said: 'Oh, but you don't feed oats to chicks.' But we told him we wanted to plant some for the sprouts and he said we could take as much as we wanted. So we filled up our pockets."



We got busy at once and made two shallow boxes. We filled them with earth, poured on water and mixed it up into a thin mud. Then we threw the oats into the earth, mixed it up again well and put the boxes under the stove so the seed would be warm.

Marya Petrovna had told us that the seeds of plants, like birds' eggs, are living things. Life slumbers inside the seed until it gets into the warm moist earth which wakes it up and it begins to grow. Like all living things, seeds can die and dead seeds won't grow.

We were very much afraid that our seeds might be "dead" ones and kept looking into the boxes to see if they had come up. Two days passed and there was no sign. On the third day we noticed that the soil in the boxes had cracked here and there and seemed a little swollen in spots.

"What's this?" asked Mishka indignantly. "Someone's been tampering with the boxes!"

"Nothing of the kind," said Lyosha Kurochkin who was on duty that day with Senya Bobrov.

"You must have been poking it with your fingers to have a look at the seeds."

"We didn't poke anything!" Senya protested.

I lifted a lump of soil and felt for the grain underneath. It had swelled up and split open and there was a little white shoot on top. Mishka also pulled out a seed and examined it for a long time.

"I know what happened!" he cried. "They poked the soil up themselves!"

"Who did?"

"The seeds. They woke up and now they're pushing their way through the soil. Look at the way the soil has swelled! They've no more room down there under the soil." Mishka ran off to call the boys to show them how the seeds were growing. Lyosha and Senya and I pulled another few seeds out of the soil. They had all begun to sprout. Soon the boys arrived and crowded round. Everyone wanted to have a look at the seeds.

"Look," said Vitya Smirnov, "the, seeds are bursting open and the oats are hatching out of them just like chicks."

"Of course," said Mishka. "Oats are also living things, only they grow up and stand in one place, but when our chicks hatch out they'll run around and squeak and ask for food. You'll see what a jolly little family we'll have!"

### THE HARDEST DAY OF ALL

Working all together was fun and the time passed quickly. At last the twenty-first day arrived. It was a Friday. We had everything ready for the brood. We found a large pot in the shed and lined it with felt to make a warming-pan for the new-born chicks. Now it stood ready on top of a pan of hot water, waiting for the first chick to hatch.

Mishka and I had wanted to stay up the night before, but Vadik Zaitsev had got his mother to allow him to take night duty, and he wouldn't hear of us being there.

"I don't need you hanging around when I'm on duty," he said. "You can go to bed."

"But what if the chickens begin hatching during the night?" we said.

"What about it? As soon as a chick comes out I'll drop it into the pot and let it dry off."

"Don't you dare drop it!" I said, horrified. "You must be very gentle with chicks."

"Don't worry, I'll be gentle. Now you toddle off to bed like good boys. You're on duty tomorrow, don't forget. So you'd better have a good night's rest."

"All right," agreed Mishka. "Only please be sure and see you wake us if the chicks begin hatching. We've waited so long for this." Vadik promised.

We went off to bed, but I couldn't sleep for a long time for worrying

about the chickens. Next morning I woke up very early and ran to Mishka's right away. He was up already too, and was sitting beside the incubator examining the eggs.

"I don't see any sign yet."

"Too early yet, most likely," said Vadik.

Vadik soon went home because the night was over and our watch was on. When he had gone, Mishka decided to examine all the eggs once more. We began turning them over and looking for some tiny little hole which the chick inside would make with its beak. But there wasn't so much as a crack in any of the shells. We closed the incubator and sat quiet for a long time without speaking.

"Suppose we break open one and see if there's a chick inside or not?" I suggested.

"No, you mustn't. Not yet," said Mishka. "The chick is still breathing through its skin and not its lungs. As soon as it begins breathing with its lungs it will crack open the shell by itself. If we crack it too soon the chick will die."

"But they must be alive inside there," I said. "Perhaps you can hear them move if you listen carefully?"

Mishka took an egg out of the incubator and put it to his ear. I bent over him and put my ear to it too.



"Be quiet!" growled Mishka. "How can I hear anything with you snoring into my ear!"

I held my breath. It was very quiet, so quiet you could hear the watch ticking on the table. Suddenly the bell rang. Mishka jumped and nearly dropped the egg. I ran to open the door. It was Vitya. He wanted to know whether the chicks had begun to hatch out yet.

"No," said Mishka. "It's too early."

"All right, I'll drop in again before school," said Vitya.

He went away and Mishka took the egg out again and put it to his ear. He sat like that for a long time with his eyes closed, listening intently.

"I can't hear a sound," he said at last.

I took the egg and listened too. But I could not hear anything either.

"Perhaps the embryo is dead?" I said. "We ought to try the others."

We took the eggs out one after the other and listened to them all, but not one of them gave any sign of life.

"They couldn't all be dead, could they?" said Mishka. "One of them at least must be alive."

The bell rang again. This time it was Senya Bobrov.

"What are you doing up so early?" I asked him.

"I came to find out how the chicks are coming along."

"They aren't coming along at all," Mishka answered, time "It isn't time yet."

Seryozha arrived next. "Well, any chicks yet?"

"You are too' impatient," said Mishka. "You expect the chicks to start hatching from early morning. There's plenty of time."

Seryozha and Senya sat for a while and then left. Mishka and I began listening to the eggs again.

"No, it's no use," he said miserably. "I don't hear a thing."

"Perhaps they're keeping still just to fool us?" I suggested.

"They ought to be cracking the shell by now."

Then Yura Filippov and Stasik Levshin came, and after them, Vanya Lozhkin. They kept coming, one after the other, and by the time we were due to leave for school, it began to look like a general meeting. We called Maya and told her what to do if the chicks began hatching without us, and left with the others for school.



I don't know how we lived through that day. It was the hardest day in our lives. It seemed to us that someone was deliberately stretching out the time and making every lesson ten times longer than usual. We were all terribly Afraid that the chickens would begin to hatch out while we were in school and that Maya would not manage by herself. The last lesson was the worst. We thought it would never end. It was so long that we began to wonder whether we hadn't missed the bell. Then we thought that perhaps the bell was out of order. Or that Aunt Dunya, the janitress, had forgotten to ring the last bell and had gone home and we'd have to sit in school until tomorrow morning. The whole class was fidgety and nervous. Everybody sent little notes to Zhenya Skvortsov asking what time it was, but as luck would have it Zhenya had left his watch at home that day. It was so noisy in class that Alexander Yefremovich had to stop several times to ask for silence. But the noise continued. Finally Mishka raised his hand to say that the lesson must be over, but just at that moment the bell went and everyone sprang up and rushed to the door. Alexander Yefremovich made us all sit down again and said no one must leave his desk until the teacher had left the room. Then he turned to Mishka:

"You wanted to ask me something?"

"No, I just wanted to say that the lesson was over."

"But you raised your hand before the bell rang?"

"I thought the bell was out of order."

Alexander Yefremovich shook his head, picked up the register and went out of the room. The boys dashed into the corridor and down the stairs. There was a jam at the exit, but me and Mishka managed to push our way through. We rushed headlong down the street, with the others tearing after us.

Five minutes later we were home. Maya was sitting at her post by the incubator sewing a new dress for her doll Zinaida.

"Anything happened?" we asked.

"Nothing."

"How long is it since you looked into the incubator?"

"Quite a long time ago. When I turned over the eggs."

Mishka went over to the incubator. All the boys crowded around, craning their necks and standing on tiptoe. Vanya Lozhkin climbed on to a chair to see better, fell off and nearly knocked Lyosha Kuroch-kin down. But Mishka couldn't bring himself to open the lid. He was afraid to look.

"Come on, open it up! What are you waiting for?" someone said.

At last Mishka lifted up the lid. The eggs lay at the bottom as before, looking like big white pebbles.

Mishka stood for a while without saying anything, then he turned them over carefully one by one and examined them from all sides. "Not a single crack!" he announced mournfully.

# WHO IS TO BLAME?

The boys stood around in silence.

"Maybe they won't hatch out at all," said Senya Bobrov. "What do you think, eh?"

Mishka shrugged his shoulders: "How can I tell? I'm not a sitting-hen! What do I know about hatching?"

Everyone began talking at once. Some said the chicks wouldn't hatch out at all, some said they still might, others said they either would or they wouldn't. At last Vitya Smirnov stopped all the argument.

"It's too soon to tell for sure," he said. "The day isn't over yet. We have to carry on as before. And now everybody clear out except those on duty."

The boys went home. Mishka and I were left alone. We took another look at the eggs to see if there wasn't at least one tiny crack somewhere, but there was nothing. Mishka closed the lid.

"All right, I don't care what happens! It's too soon to get upset anyway. We'll wait until evening and if nothing happens by then we can begin to worry."

We decided not to worry and settled down to wait patiently. But that

was easier said than done. We couldn't stop worrying however hard we tried and every ten minutes we peeped inside the incubator. The other boys were worried too and kept coming in to inquire. Everyone had the same question: "Well, how is it?"

After a while Mishka stopped answering and only shrugged his shoulders, but he had to shrug them so often that by the end of the day his shoulders were hunched right up to his ears.

As the evening wore on the boys stopped coming. Vitya was the last to drop in. He sat with us for a long time.

"Perhaps you miscalculated?" he said.

We began counting again but there was no mistake. This was the twenty-first day and it was coming to an end and there were no chicks.

"Never mind," Vitya said to console us. "We'll wait till the morning. They may hatch out during the night."

I persuaded my mother to let me stay over at Mishka's place and we decided to sit up all night and watch. We sat for a long time by the incubator in silence. We had nothing to talk about any more. We couldn't even day-dream because all our hopes were dashed. Soon the trams stopped running and it grew very quiet. The street lamp outside the window went out. I lay down on the sofa. Mishka dozed sitting up, but he nearly fell off the chair, so he came over and lay beside me on the sofa, and we fell asleep.

When we woke up it wad daylight and everything was as before. The eggs still lay in the incubator, not so much as a crack in any of them, and not a sound inside.

All the boys were terribly disappointed.

"What could have happened?" they asked. "We followed all the instructions carefully, didn't we?"

"I don't know," said Mishka, shrugging his shoulders.

Only I knew what had happened. Of course the embryos had died that time I overslept. The temperature had gone down and they had perished from the cold—died before their lives had properly begun. I felt very guilty before the others. All their trouble would be for nothing and all because of me! But I couldn't tell them just then, T decided to own up later on when the whole incident would be forgotten and they wouldn't feel so bad about losing the chicks.

We were all very sad that day in school. All the boys looked at us with such sympathy as if we were in mourning for somebody, and when Senya Bobrov took it into his head to call us the "chickabiddies," just out of habit, the others jumped on him and said he ought to be ashamed of himself. Mishka and I felt quite uncomfortable.

"I'd rather they scolded us!" said Mishka.

"Why should they?"

"Well, look at all the work they did for us. They have every right to

be sore."

After school, some of the boys dropped in, but soon they stopped coming. All except Kostya Devyatkin, who came once or twice. He was the only one who hadn't given up hope yet.

"See," Mishka said to me. "Now all the boys are langry with us. Why should they be, I'd like to know? Anyone can make a mistake."
"But you said yourself they have a right to be sore."

"So they have," replied Mishka irritably. "And so have you. It's all my fault, I know."

"Why is it your fault? Nobody is blaming you for anything. And it isn't your fault at all," I said.

"Yes, it is. But you won't be too angry with me, will you?"

"Why should I be?"

"Oh, because I'm such a good-for-nothing. It's all my bad luck, nothing I do ever comes to any good."

"That's not true. It's me who spoils everything," I said. "It's all my fault."

"No, it isn't. It's my fault. It's me who killed the chicks."

"How could you have killed them?"

"I'll tell you, only promise you won't be angry?" said Mishka. "Once I fell asleep early in the morning, and when I woke up and looked at the thermometer it had gone up to 104 degrees. I opened the lid quickly to let the eggs cool off, but I suppose it was too late."

"When was "that?"

"Five days ago."

Mishka looked terribly guilty and miserable.

"Well, you needn't worry," I said to him. "The eggs were spoiled long before that."

"Before what?"

"Before you overslept."

"Who spoiled them?"

"I did."

"You? How?"

"I also overslept, and the temperature went down, and the eggs were spoiled."

"When did that happen?"

"On the tenth day."

"Why didn't you say anything before?"

"I was afraid to own up. I thought perhaps the chicks hadn't died after all, but now I know they did, and it was me who killed them."

"And you let the boys do all that work for nothing," said Mishka looking sternly at me, "just because you were afraid to own up."

"Well, I thought that perhaps it would be all right. The boys would have decided to carry on in any case, otherwise we would never know whether the chicks had died or not."

"Oh, would they!" said Mishka indignantly. "Anyhow you ought to have owned up right away so we could all decide together instead of you deciding for everybody else."

"Look here," I said, "what are you shouting at me for? Why didn't you own up yourself? You also overslept, didn't you?"

"So I did," said Mishka, contrite. "I'm a pig for sure. You can punch my nose if you like."

"I shan't do anything of the kind. But mind you don't go and tell the boys what I told you," I said.

"I'll tell them tomorrow. Not about you, but about myself. Let everyone know what a pig I am. That will be a punishment for me."

"All right, then I'll own up too," I said.

"No, you'd better not."

"Why not?"

"Well, you know them. They always laugh at us because we do everything together. We go to school together, do our lessons together and even get low marks together. Now they'll say we overslept our watch together too."

"Let them say what they like," I said. "Besides, I couldn't stand by and let them laugh at you, could I?"

## WHEN ALL HOPE FLED

That sad day drew to a close and evening came again. The situation in the kitchen remained unchanged: the incubator was warm, the lamp still burned, but our hopes were dead. Mishka sat silently staring at the egg in his hand. We couldn't make up our minds whether to crack it open or wait a while. All of a sudden Mishka sat up with a start and stared at me with wide-open eyes. I thought he had seen a ghost behind me and I turned round quickly. But there was nothing there. I turned back to Mishka.

"Look!" he said hoarsely, stretching out his hand with the egg in it.

At first I couldn't see anything at all, but then I saw what looked like a small crack in one spot.

"Did you knock it against something?"

Mishka shook his head.

"Then—then—the chick did it?"

Mishka nodded.

"Are you so sure?"

Mishka shrugged his shoulders.

I carefully lifted the bit of broken shell with my nail, making a small hole in the egg. The same moment a tiny yellow beak thrust itself through the hole and then disappeared.

We were so excited we couldn't speak and just hugged each other with joy.

"Hurrah! It's happened!" shouted Mishka and burst out laughing. "Now where shall we run to? Where shall we go first?"

"Wait a minute!" I said. "What's the rush? Where are you off to?"

"We've got to run and tell the boys!" He rushed to the door.

"Wait!" I said. "Put the egg back first. You aren't going to take it with you, I hope."

Mishka came back and put the egg into the incubator. At that moment Kostya came.

"We've got a chick already!" shouted Mishka.

"You're fibbing!"

"Word of honour!" "Where is it?"

Mishka lifted the incubator lid and Kostya looked inside.

"Where's the chick? All I see is eggs."

Mishka had forgotten where he had put the egg with the crack in it and now he couldn't find it. Finally he chanced on it and showed it triumphantly to Kostya.

Kostya squealed with delight. "Look, there's a real chicken's beak sticking out of it!" he cried.

"Of course it's real. Did you think it was some circus trick, or what?"

"Wait, fellows. You hang on to that egg and I'll go and call the others," said Kostya.

"That's right, go and get them. They didn't believe there would be any chicks at all. No one came in all evening."

"That's where you're mistaken. They're all at my place and they still believe in the chicks, but they were afraid to bother you, so they sent me to find out how things were coming along."

"Why were they afraid?"

"Well, they knew how badly you must be feeling about it and they didn't want to be in the way."

Kostya ran out and we heard him go clattering down the stairs, three steps at a time.

"Golly!" cried Mishka. "I haven't told Mother yet!" He ran to call his mother, and I snatched up the egg and ran off to show it to my mother.

Mother looked at it and told me to run and put it back in the incubator at once, otherwise it might cool down and the chicken would catch cold.

I rushed back to Mishka's place and there he was in the kitchen all excited and his mother and father were standing laughing at him. As soon as he saw me Mishka pounced on me:

"Did you see where I put that egg? I've turned the whole incubator

upside down and I can't find it anywhere!"

"What egg?"

"You know . . . the one with the chick in it!"

"Here it is," I said.

When Mishka saw the egg in my hands he nearly had a fit.

"You silly ass! What do you mean by picking up the egg and running off with it!"

"Hush," said Mishka's mother. "All that fuss about an egg!"

"But, Mother, it isn't an ordinary egg. Look at it!"

Mishka's mother took the egg and looked at the tiny little beak showing through the hole. His dad looked at it too.

"Hm," he said smiling. "Remarkable!"

"There's nothing remarkable about it," said Mishka with an important air. "It's just a natural phenomenon."

"You're a natural phenomenon yourself," laughed Mishka's dad. "There's nothing remarkable about the chicken of course. What's remarkable is that it hatched out in your incubator. I must admit I didn't think anything would come of it."

"Why didn't you say anything then?"

"Why should I? I'd rather you spent your time breeding chickens than running wild in the street."

At that point Maya came into the kitchen. She was just up from bed, and her dress was on back to front, and her shoes were on her bare feet. We allowed her to hold the egg for a minute or two. She put her eye to the hole and just then the chick stuck out its beak.

Maya screamed. "He wanted to peck me!" she cried. "You naughty little chick, you! Not out of your shell and fighting already."

"You mustn't shout at a new-born chick like that!" said Mishka. "You'll frighten it." He took the egg and laid it back in the incubator.

At that moment there was a noise outside on the stairs and the sound of running feet. Soon the kitchen was full of boys. The egg had to be taken out again and shown around. Everybody wanted to look into the hole and see the chick.

"Fellows," cried Mishka. "Give us back the egg. We've got to put it back in the incubator, or the chicken will catch cold."

But no one paid any attention to him. We had to take the egg away by force.

"Aren't there any cracks in the other eggs yet?" Vitya asked.

We inspected the other eggs but there was no sign of any more cracks

"No, No. 5 is the only one. The rest have no cracks," said Mishka.

"Perhaps they'll hatch out later on," said the boys.

"It doesn't matter," said Mishka. "Even if only one chick hatches out I'll be happy. At least we shan't have had all that trouble for

nothing!"

"Shouldn't we break open the shell and let the chick out?" said Senya Bobrov. "He must be uncomfortable, sitting in there."

"Oh no," said Mishka. "You mustn't touch the shell. The chick's skin is still too tender and you can hurt it."

It was quite some time before the boys finally left. Everyone wanted to be there to see the chick climb out of the shell, but it was already late and they had to go home.

"Never mind," Mishka said. "This won't be the only chick. You'll see, the others will soon begin hatching out too."

When the boys had gone Mishka examined the eggs once more and found another crack.

"Look," he shouted. "No. 11 is beginning to hatch out too!"

I looked and sure enough there was a crack on the egg which had the number "11" written on it.



"What a pity the boys went away," I said. "Now it's too late to run for them."

"Yes, it is a pity!" murmured Mishka. "But never mind, tomorrow they'll see the chicks already hatched."

We sat down by the incubator, nearly bursting with happiness.

"You and me are certainly the lucky ones," said Mishka. "I bet very few people are as lucky as we are."

Night came. Everyone had gone to bed long ago but Mishka and I didn't feel the least bit sleepy.

The time went very fast. At about two o'clock in the morning another two eggs cracked: Nos. 8 and 10. And the next time we looked into the ,incubator there was a real surprise waiting for us. There among the eggs sat a tiny new-born chick. It was trying to stand on its legs, but it kept toppling over.

I nearly choked with happiness.

I picked up the chick. It was still wet and instead of feathers it had silky yellow down sticking untidily all over its tender pink back.

Mishka opened up the pot and I put the chick inside and we added hot water to the pan underneath so the chick should be warm.

"It's very warm in there, he'll soon dry up and look nice and fluffy,"

said Mishka.

He took the two halves of the shell out of the incubator.

"It's a wonder how such a huge chick could fit into such a little shell!"

And the chick really did look huge compared with the shell. But, after all, he had been curled up inside it, with his legs tucked up under him and his head twisted round^ and now he had straightened out and was standing on his spindly little legs with his neck stretched out.

Mishka was looking at the broken shell when suddenly he cried out: "Look, this is the wrong chick!"

"What do you mean, the wrong chick?"

"It's not the first one! The first one that cracked the shell was No. 5, this is No. 11."

Sure enough the shell had the figure 11 written on it.

We looked into the incubator. No. 5 was still lying where we had laid it.

"What's the matter with it?" I said. "It was the first to crack the shell and now it won't come out!"

"It's probably too weak to break the shell itself," said Mishka. "Let it lie a little while, perhaps it'll get stronger."

## **OUR MISTAKE**

We were so busy that we did not notice that morning had come until we saw the sun shining in the window. Jolly sunbeams played on the kitchen floor, making the room look bright and gay.

"You'll see, the boys will be coming in soon," said Mishka. "They won't be able to hold out."

The words were hardly out of his mouth when two of them arrived —Zhenya and Kostya.

"Want to see a miracle?" cried Mishka and he picked the new-born chicken out of the warming-pan. "There! A miracle of nature."

The boys examined the chick solemnly.

"And three more eggs have cracked," Mishka boasted. "Look, Nos. 5, 8 and 10."The chick evidently didn't like the cold. When we held him in our hands he began to fidget, but as soon as we put him back into the pan he quieted down.

"Have you fed him?" asked Kostya.

"Oh no," said Mishka. "It's too soon to feed him. You only feed them the day after they're hatched."

"I bet you haven't slept all night," Zhenya said.

"No. . . . We've been far too busy."

"Then you'd better go and take a nap and we'll take over for a while," suggested Kostya.

"All right. But promise you'll wake us if another chick appears."
"Of course."

Mishka and I lay down on the couch and went to sleep at once. To tell the truth I had felt sleepy for a long time. The boys woke us up at about ten o'clock.

"Come and look at miracle No. 2!" cried Kostya.

"Miracle number what?" I muttered, still 'half asleep. I looked round and saw that the kitchen was full of boys.

"Here it is!" they cried and pointed to the saucepan.

Mishka and I jumped up and ran to look into the pan. There were two chicks there now. One of them was fluffy and round and as yellow as egg powder. A real beauty!

"Isn't he splendid!" I said. "Why is the first one so mangy looking?" The boys laughed. "That one is the first one!"

"Which one?"

"The fluffy one."

"No, it isn't. It's that skinny one."

"The skinny one has just hatched out. The first one has dried up and that's why he's fluffy."

"Isn't that great!" I said. "Then the second one will be fluffy too when he dries?" "Of course."

"What number is that?" Mishka asked. The boys looked puzzled.

"I thought you knew all the eggs are numbered," said Mishka. "No, we didn't look for any number," said Kostya. "We can see by the shell," I said. "The shell must still be inside." Mishka looked into the incubator and let out a yell: "Look! There's another two brand-new chicks in there!" Everybody made a dash for the incubator. Mishka carefully took out two new chicks and showed them to us.

"There they are, the eagles!" said Mishka proudly. We put them into the warming-pan with the other two. Now we had four chicks. They sat huddled together for warmth.

Mishka took the broken shells out of the incubator and looked for the numbers.

"Nos. 4, 8 and 10," he said. "But which is which?" Of course you couldn't tell now what shell they had hatched from. The boys laughed. "The numbers are all mixed up!" "No. 5 is still lying there in the incubator," I said. "So it is," cried Mishka. "What's the matter with it? Maybe it's dead?"

We got out No. 5 and widened the hole a little. The chick was lying quietly inside. It moved its head.

"Hurrah, it's alive!" we shouted and laid it back inside the incubator.

Mishka checked over the remaining eggs and found another crack, in No. 3. The boys clapped their hands.

Things were really humming at last!

After a while Maya came in. We showed her the chicks.

"That one is mine!" she said, trying to snatch at the fluffy one.

"Just a minute," I said. "Don't snatch. He has to sit there in the warming-pan for a while, otherwise he'll catch cold."

"All right, I'll take him later on. But the fluffy one will be mine. I don't want the skinny one."

It was Sunday. Since there was no school that day the boys spent the whole day in our kitchen. Mishka and I sat in the place of honour, beside the incubator. To the right, near the stove, stood the warming-pan with the new-born chicks inside, on the stove was the pot of hot water, and on the window-sill were the boxes with the oats which were already a bright green. The boys laughed, cracked jokes and told all sorts of interesting stories.

"Have you figured out why they didn't hatch out when they were supposed to?" one of the boys asked. "You expected them on Friday."

"I can't think what happened," replied Mishka. "The book says that they are supposed to hatch out on the twenty-first day and this is the twenty-third. Maybe the people who wrote the book made a mistake."

"If anyone made a mistake, it's you," said Lyosha Kurochkin. "When did you put the eggs in the incubator?"

"On the third. It was on a Saturday. I remember perfectly because the next day was Sunday."

"Listen here," said Zhenya Skvortsov. "There's something wrong: you put the eggs in on Saturday and the twenty-first day comes out on Friday."

"He's right," said Vitya Smirnov. "If you started on Saturday, the twenty-first day ought to be on Saturday. There are seven days in a week and twenty-one days makes exactly three weeks."

"Three times seven is twenty-one!" laughed Senya Bobrov. "At least that's what the multiplication table says."

"I don't know about the multiplication table but that's how we figured it," said Mishka huffily.

"How did you count?"

"I'll tell you," said Mishka, counting on his fingers. "The 3rd was the first day, the 4th was the second, the 5th, the third. . . ."

He counted all the way up to Friday and got twenty-one days.

Senya looked puzzled. "That's funny. According to the multiplication table the twenty-first day comes on Saturday, and when you count on your fingers it comes out on Friday."

"Show us again how you counted," said Zhenya,

"Look," said Mishka, bending his fingers again, "Saturday, the 3rd, was the first day, Sunday, the 4th, was the second day. . . ."

"Just a minute! You're wrong! If you began on the 3rd, you shouldn't count that day."

"Why?"

"Because the day wasn't over. It didn't pass until the 4th. That means you ought to count from the 4th."

Suddenly Mishka and I both saw it in a flash. Mishka tried counting the new way and it came out right.

"Of course," he said. "The twenty-first day was yesterday."

"Then everything came out as it should have," I said. "We put the eggs in the incubator on Saturday evening, and the first crack appeared on Saturday evening. Exactly twenty-one days later."

"You see how much trouble you can avoid by knowing how to count properly," said Vanya Lozhkin.

Everyone laughed.

"Yes," said Mishka, "if we hadn't made that blunder we could have saved ourselves a lot of worry and bother."

## **BIRTHDAY**

By the end of that day there were already ten chickens sitting in our warming-pan. The last to appear was No. 5. He didn't want to come out of his shell for anything and we had to break off the top to help him out. If we hadn't done that he would still have been sitting there. He was smaller than the other birds and weaker, probably because he had been in the shell so long.

Towards evening only two eggs were left in the incubator. They looked very sad lying there all by themselves and there was still no sign of a crack on them. We kept the lamp on in the incubator but they didn't hatch out that night either. All the new-born chicks spent the night very comfortably in the warming-pan and in the morning we let them down on the floor—ten yellow balls of fluff cheeping for all they were worth. They blinked their little eyes and turned away from the bright light. Some stood quite firmly on their little legs, others were still wobbly. Some even tried to run but they weren't very good at it. Sometimes they pecked with their little beaks at small spots on the floor and even at the shiny heads of nails on the floor-boards.

"Look at that, they're hungry!" cried Mishka.

We quickly boiled an egg, chopped it up fine and spread it on the floor, but the chicks didn't know what to do with it. We tried to feed them out of our hands.

"Eat, you silly things," we said. But the chicks didn't even look at the food. Just then Mishka's mother came into the kitchen.

"They won't eat any egg, Mum," Mishka said.

"You must teach them."

"How? We told them to eat but they won't listen to us."

"That's not the way to teach chicks. You have to tap on the floor with your finger."

Mishka sat down beside the chicks and tapped on the floor next to the egg crumbs. The chicks watched the finger pecking at the food and they began imitating it. In a few minutes they had eaten up all the egg. Then we put down a saucer of water and they drank it up. You didn't have to teach them that. Then they got into a huddle and we put them back in the pan to warm up.

When Marya Petrovna came to class that day we all ran to meet her with the news that our chicks had hatched out. She was very pleased. "So this is your chicks' birthday," she said. "I congratulate you."

We all laughed, and Vitya Smirnov said: "We must have a birthday party for them. Let's have it today."

Everyone approved of the idea. "Yes, let's, let's. Marya Petrovna, will you come to our chicks' birthday party?"

"Thank you, I'll come with pleasure," Marya Petrovna said, smiling. "I'll bring them a present too."

"We must all bring them presents!" the boys cried.

When we came home from school Mishka and I waited impatiently for the guests to arrive. We were dying to see what sort of presents our chicks would get.

Senya Bobrov came first with a bouquet of flowers.

"What's that for?" said Mishka.

"For the chickens. That's my present."

"Whoever heard of flowers for chicks. They can't eat flowers, can they?"

"They don't have to eat them. They'll look at them and smell them."
"What an idea! As if they haven't seen flowers before."

"Of course, they haven't. Get me a jar to put them in. You'll see how nice they'll look."

We got a jar and put the flowers in water. The next to arrive were Seryozha and Vadik. They both brought bunches of snowdrops.

"What is everybody bringing flowers for?" said Mishka scowling.

"Don't you like our presents?" said Vadik offended. "It isn't nice to look gift horses in the mouth."

We put their flowers in water too.

Then Vanya Lozhkin came and brought half a kilo of oatmeal. Mishka looked doubtful: "I'm afraid they won't eat it."

"You can try," said Vanya.

"No, we'd better wait and ask Marya Petrovna."

Just then Marya Petrovna came. She carried something wrapped in newspaper. It turned out to be a bottle filled with what looked like milk.

"Milk!" shouted Mishka. "We never thought of giving them milk!"

"This is buttermilk," said Marya Petrovna. "It is just what they need for the first few days. You'll see how they like it."

We let the chicks out of the pot and poured the buttermilk into a saucer and gave it to them. They drank it up with gusto.

"That's what I call a real present for chicks," said Mishka delighted, "You have to know what to bring to a chickens' birthday party."

The guests kept coming one after another. Vitya and Zhenya brought millet. Then Lyosha Kurochkin came running in with a baby's rattle.

"I couldn't think what to bring, and I saw these rattles in a shop on the way here, so I bought them one."

"A brilliant idea, I must say," said Mishka sarcastically. "The perfect birthday gift for a chicken."

"How was I to know what to buy? Besides, they might like the rattle for all you know."

He ran over to the chickens and shook the rattle over their heads. They stopped pecking at the buttermilk and lifted their heads to listen. "See that!" cried Lyosha overjoyed. "They like it!"

Everyone laughed. "All right," Mishka said. "Now let them eat in peace."

I asked Marya Petrovna whether we could feed them oatmeal. She said they ate any sort of meal provided it was cooked.

"How do you cook it?" Mishka wanted to know.

"Just the way you cook porridge," said Marya Petrovna.

Mishka and I wanted to cook the porridge at once but just then another guest arrived—Kostya Devyatkin.

"Have you brought a present?" the boys demanded.

"Of course I have," said Kostya, pulling two pies out of his pocket.

"What a funny present," laughed the boys.

"You always have pies at birthday parties, don't you?" said Kostya.

"What's inside them?" Mishka asked suspiciously.

"Rice."

"Rice?" cried Mishka.

He snatched the pies out of Kostya's hand and began scooping the rice out of them.

"Hey! What're you doing!" said Kostya. "Don't you believe me?"

But Mishka didn't answer. He scooped the rice out on to a saucer and put it in front of the chicks. They began pecking at it right away.

When Maya saw that everyone had brought gifts for the chicks she went to her room and brought a piece of red ribbon, cut it into little strips and tied a red bow round each chick's neck. We put the jars of flowers down on the floor near the chicks, and what with the flowers, the ribbons, and the saucers of buttermilk, rice and fresh water, it really did begin to look like a birthday party. Kostya wanted to feed them grass, but Marya Petrovna said they were too young for greens,

and we had better wait till tomorrow.



After the chicks had enough to eat and drink we took off their ribbons and put them back into the warming-pan. Marya Petrovna advised us to fence off a part of the kitchen for them and keep a pot of hot water to warm themselves against.

"The best thing would be to take them to the country. Here indoors they may get sick and die. They need fresh air," said Marya Petrovna. We showed her our incubator and the two eggs still lying inside.

"I'm afraid those won't hatch out any more," said Marya Petrovna.
"But it doesn't matter. You have done very well as it is."

"That's because all the boys pitched in and helped us," said Mishka. "We couldn't have managed by ourselves."

"I was afraid nothing would come of it because I overslept once and the temperature went down," I said.

"They can cool down quite a bit without being spoiled," said Marya Petrovna. "After all, the hen doesn't sit on her eggs all the time. Once a day she goes off to get something to eat, leaving the eggs uncovered. Incubator eggs are also cooled off once a day so as to create the natural conditions for the embryo to develop. It is much worse to over heat them."

"I overheated them once," said Mishka. "The temperature went up to 104 degrees."

"Most likely you noticed it before any serious harm was done," said Marya Petrovna. "But if you had let the temperature remain high for a long time the eggs would surely have been spoiled."

That evening we broke open the two remaining eggs. In both of them we found undeveloped embryos. Life had stopped and the chicks had died before they were born. Perhaps that was the result of overheating.

We switched off the lamp: it had burned for exactly twenty-three days. The mercury in the thermometer gradually went down. The incubator cooled off. But in the saucepan near the stove was our happy family—ten fluffy little chicks.

## TO THE COUNTRY

Our little family lived very happily all together. The chicks felt quite all right so long as they were close together. But if any one of them strayed away from the others he would start cheeping nervously and running about looking for his brothers, and he wouldn't calm down until he had found them.

Maya had wanted to take her chick away from the very beginning, but we wouldn't let her. Then one day she said she wouldn't wait any more and she picked one of the chicks up and took it to her room. Half an hour later she came back all in tears:

"I can't bear it! It breaks my heart to hear him cry. I thought he'd get used to it after a little while, but he keeps crying so pitifully I can't stand it!"

As soon as she put the chick on the floor he made straight for the ether chicks huddled together in the corner.

We fenced off a corner of the kitchen for them, spread a piece of oilcloth on the floor and put an iron pot of hot water on it. We covered the pot with a pillow to keep the water from cooling down too quickly. The chicks nestled under the pillow around the warm pot and felt as comfy as if they were nestling under the mother-hen's wings. The pot with hot water took the place of the brood-hen.

Sometimes we took them out into the yard, but it was dangerous for them there: too many stray dogs and cats prowling about. So they spent most of the time indoors, and we were very much afraid that they were not getting enough fresh air. One chick worried us particularly. He was smaller than the others and less lively. He was a thoughtful sort of chick. He often sat quietly by himself instead of running around with the others and he ate very little. That was No. 5, the one that had hatched out last.

"We really ought to pack them up and take them to the country," said Mishka. "I'm afraid they might get sick."

But we could not bear the thought of parting with them and so we kept putting it off from day to day.

One morning Mishka and I came to feed the chicks as usual. By now they had learned to know us and they came running from under the warm pot to meet us. We had brought them a plate of millet gruel, and they set to it with gusto, pushing one another out of the way and jumping over one another's head, each one trying to get ahead of the others. One of them even got on the plate with his feet.

"Where's No. 5?" said Mishka.

No. 5 usually hung behind the others. Since he was the weakest he got pushed aside and we usually had to feed him separately. Sometimes he didn't eat anything, but he always came running with the others because he didn't want to be left alone. But this time there was no sign of him. We counted the chicks and found that one was missing.

"Perhaps he's hiding behind the pot?" I said. I looked behind the pot and there he was lying on the floor. I thought he was just taking a rest. I stretched out my hand and picked him up. His little body was quite cold and his head hung down lifelessly on his skinny little neck. No. 5 was dead.

We stared at him for a long time, feeling so sad we could not speak.

"It's our fault!" Mishka said at last. "We ought to have taken him to the country. He would have got nice and strong there in the fresh air,"

We buried him in the back yard under a lime-tree, and the very next day we packed the others in a basket and set out for the country. All the boys came to see us off.

Maya wept bitterly when she kissed her own chick good-bye. She wanted terribly to keep him, but she was afraid he would be lonesome for his little brothers, and so she agreed to let us take him to the country.

We covered the basket with a shawl and went off to the station. The chicks were warm and comfortable in the basket. They sat quietly all the way, cheeping softly to one another now and again. The passengers looked at us curiously when they heard the chicks cheeping and guessed what we had in the basket.

"Well, my young poultry farmers, you've come for more eggs, I suppose?" laughed Aunt Natasha when she saw us.

"No," said Mishka. "We've brought you some chicks instead."

Aunt Natasha peeped into the basket.

"Heavens alive!" she cried. "Where on earth did you get all those chicks?"

"We hatched them in our own incubator."

"You're joking. You must have bought them in some bird shop."

"No, Aunt Natasha. Remember those eggs you gave us a month ago? Well, we've brought them back to you, but now they're chicks."

"Well I never!" cried Aunt Natasha. "You'll want to be poultry farmers or something like that when you grow up, I suppose."

"We don't know yet," said Mishka.

"But aren't you sorry to part with the chicks?"



"We are, terribly," replied Mishka. "But you see, it isn't good for them to live in town. Here the air is pure and fresh and they have more room to run about. They'll grow up into fine strong birds. The hens will lay eggs for you and the cocks will crow. One of the chicks died and we buried him under the lime-tree."

"You poor dears," said Aunt Natasha, putting her arms round Mishka and me. "But never mind. It can't be helped. All the others are fine and strong."

We let the chicks out of the basket and watched them romping about in the sunshine. Aunt Natasha said she heard her hen clucking, and Mishka and I ran with her to the shed to look at it. She was sitting in a basket with hay sticking out on all sides. She looked sternly at us as if she was afraid we had come to take her eggs away.

"That's good," said Mishka. "Now our chicks will have playmates. They will have lots of fun."

We spent all day in the country. We went for a walk in the woods and took a dip in the river. The last time we had been there it was early spring and the fields had been still bare. At that time the tractors had been busy in the fields turning up the soil. Now the fields were covered with green shoots which spread in a huge green carpet as far as you could see.

It was lovely in the woods. All sorts of beetles and other insects crawled about in the grass, butterflies fluttered about everywhere and birds sang on every tree. It was so beautiful that we didn't want to go home. We decided we would come here in the summer, build a tent on the river-bank and live there like Robinson Crusoe.

But finally it was time to go. We went back to Aunt Natasha's to say good-bye. She gave us each a piece of cake to eat in the train and made us promise to come to her for the summer holidays. Before leaving, we went into the back yard for a last look at the chicks. They seemed quite at home already and were running about among the trees

and bushes cheeping merrily. But they still kept close together and went on cheeping so that if any of them strayed away in the grass he could easily find the others.

"Good-bye, jolly family!" said Mishka. "Have a nice time in the fresh air and sunshine, get big and strong and grow up to be fine healthy birds. Always keep together and stand up for one another. Remember you are all brothers, children of the same mother ... er ... 1 mean the same incubator, where you all lay side by side when you were still plain ordinary eggs and couldn't run about or talk ... er ... cheep, I mean. ... And don't forget us because we made the incubator, and that means if it wasn't for us you wouldn't be here and you wouldn't know how wonderful it is to be alive!"

That's all.

